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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/706,868 | 11/12/2003 | Siegfried Blumel | 903-016 (TG168 US) | 6745 |

24295 7590 03/23/2005

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EXAMINER

PAHNG, JASON Y

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/706,868 | Applicant(s) BLUMEL ET AL. | |
| | Examiner Jason Y Pahng | Art Unit 3725 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/29/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-21, in the reply filed on February 19, 2005 is acknowledged.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on November 12, 2002. It appears, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b). The copy of the German application is not in IFW.

Specification

The title of the invention, "Jet mill," is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. For example, "Jet mill comprising a disk-shaped crushing chamber," etc. might be suggested.

The disclosure is objected to because of the following informalities: There appears to be a typographical error. In line 6 of page 8, the word "will" should be "with."

Claim Objections

Claim 4 is objected to because of the following informalities: "casing casing" in line 2 appears to be a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, is the "at least one inlet port" in line 8 the same as the "at least one inlet port" in line 5? If not, different names, such as a first inlet and a second inlet, are required.

It appears that claim 2 does not add any additional limitations over claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-8, 10-15, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto (US 6,196,482).

With regard to claim 1, Goto discloses a jet mill including:

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1. an inner casing (7, 9, 10, 11) having abrasion resistant inner surfaces;
2. the inner casing (7, 9, 10, 11) having an inlet (13) and an outlet (14);
3. the inner casing (7, 9, 10, 11) having an inlet (3) for introducing a propellant fluid; and
4. a pressurized fluid filled volume contained between an inner surface (of part 6 near the nozzles 3) of the outer casing (part 6 and top and bottom part covering parts 9 and 10) and the outer surface (of the nozzles 3) of the inner casing (7, 9, 10, 11).

With regard to claim 2, Goto discloses an outer casing (part 6 and top and bottom part covering parts 9 and 10).

With regard to claims 5, 11, and 19, Goto discloses an inner casing comprising four parts (7, 9, 10, 11).

With regard to claims 6, 7, 12, and 13, Goto discloses an inner casing made of either a single abrasion-resistant material or from different abrasion-resistant materials (column 6, lines 16-21). According to the claims, the invention would perform equally well with an inner casing made of either a single abrasion-resistant material or from different abrasion-resistant materials.

With regard to claims 8 and 17, Goto discloses a smooth abrasion resistant inner surface (Figure 1).

With regard to claim 10, Goto discloses hard metals for the inner surfaces (column 6, lines 16-21).

With regard to claims 14 and 15, Goto discloses air and nitrogen as the propellant fluid (column 6, lines 22-24).

Claims 1, 2, 8, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Coombe (US 4,502,641).

With regard to claim 1, Coombe discloses a jet mill including:

1. an inner casing (4) having abrasion resistant inner surfaces;
2. the inner casing (4) having an inlet (19) and an outlet (6);
3. the inner casing (4) having an inlet (3) for introducing a propellant fluid; and
4. a pressurized fluid filled volume contained between an inner surface of the outer casing (2) and the outer surface of the inner casing (4).

With regard to claim 2, Coombes discloses an outer casing (2).

With regard to claims 8 and 17, Coombes discloses a smooth abrasion resistant inner surface (Figures 1 and 2).

With regard to claim 16, Coombe discloses a steam (column 3, lines 51-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Andrews (US 4,248,387). Goto discloses substantially all of the claimed structure with the exception of a clamp and a vent. In a closely related art, Andrews discloses a jet mill with a clamp (22) and a vent (62) in order to compress grinding chamber and allow pressure relief. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto with a clamp and a vent in order to compress grinding chamber and allow pressure relief, as taught by Andrews.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Andrews (US 4,248,387) as applied above, further in view of Hahn et al. (US 6,726,133). Claim 4 calls for an equalizing film for sealing. In a closely related art pertinent to the problem, Hahn discloses an RD mill with a gasket in order to seal a compressed area (column 6, lines 45-49). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto (as modified by Andrews) with a gasket in order to seal a compressed area, as taught by Hahn.

Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Belavsky (US 5,855,326). Claims 9 and 18 call for the abrasion-resistant inner surface to be textured. In a closely related art, Belavsky discloses a jet mill with a textured inner surface in order to provide different grinding conditions (column 4, lines 40-50). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto with a textured inner surface in order to provide different grinding conditions, as taught by Belavsky.

Additionally, page 7 of the specification discloses that the interior of the pulverizing casing can be of any design.

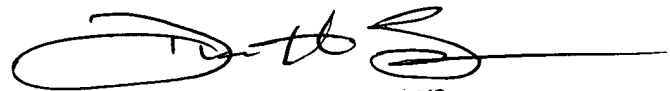
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JYP



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